An essay

On

Dysentery

By

James Thomas Gilliam

Of

North Carolina

1825.

Passed March 24th 1826

On Dysentery.

From the diversified appearances that Dysentery assumes in different parts of the world it is a matter of no small magnitude to collect from various sources as well as from a persons own experience a clear and perspicuous view of its nature cause and cure. In Northern latitudes it is most generally a disease of an inflammatory nature, requiring for its cure vigorous depleting remedies; but as it occurs in the southern sections of the United States and more particularly in the East and West Indies, it is, upon the authority of Armstrong, invariably complicated with hepatic derangement. Nor are these the only difficulties calculated to arrest the progress of a young practitioner in investigating

its diversified appearances or in establishing a method of cure that will snatch from the arms of death the unfortunate victims of its influence and secure to him the confidence and esteem of his friends.
While one practitioner is of opinion that the disease depends upon a morbid matter generated in the intestines and deduces his practice accordingly, another of equal respectability asserts that the disease is of an inflammatory character and has recourse to the lancet and other depletory remedies for its cure. How we are to reconcile such contradictory statements coming from such high authority is difficult to determine; and the best and only way of surmounting these difficulties is to relate those facts which theory indicates and experience justifies.
Dysentery may be known by frequent

inclination to go to stool, without any or but little evacuation followed by tormina and tenesmus. The stools consist mostly of mucus streaked with blood and sometimes so acrid as to excoriate the anus and occasion ulceration. At times there are severe pains in the bowels and the muscles of the abdomen are affected with spasms to such a degree as to draw the patient into a semi-flexed position. A considerable degree of nausea sometimes comes on attended with vomiting. Flatulency and sour eructations are of frequent occurrence. The patient is apt to roll and tumble about the bed and complain of his bowels being tied in many knots. Sometimes, when the patient is at stool, he discharges faeces in the form of hard compact substances called scybalae, and

almost always procures a temporary alleviation from pain. The discharges frequently resemble the washing of beef, which is a very unfavorable symptom tho' not necessarily fatal. There is one symptom mentioned by Doctor Chapman and not by Cullen, and that is when the disease is unattended by any evacuation; this is owing to the disturbed action transcending the necessary point, and such cases are generally fatal. There is sometimes a considerable degree of pyrexia preceded by cold shivering. Dysentery is frequently conjoined with catarrh, alternating sometimes with rheumatism. It is remittent and intermittent and when it occurs in crowded and ill-ventilated places it assumes the typhus type.

The remote causes of Dysentery are sudden vicissitudes of weather from heat to cold

errors in diet, negligence and carelessness in clothing, marsh effluvia &c.
The disease most frequently occurs in warm climates particularly in the East and West Indies where it reigns as an epidemic almost every year and is usually preceded by heavy rains, these are again succeeded by an intense heat which goes on alternating in this manner until the atmosphere becomes cold; this has a tendency to check the perspiration, drives the fluids to the internal parts and thus produces the disease which is an inflammation of the mucus coat of the intestines. The question might be asked how does cold produce Dysentery? In order that cold should produce the disease it is necessary that there should be some cause predisposing to it for if otherwise the bow-

ds might be affected with colic or enteritis. Admitting this fact (namely that there be a predisposing cause) cold produces the disease by constringing the cutaneous vessels and as a necessary consequence the fluids are thrown on the bowels and excite there to increased action which soon result in inflammation. Sydenham calls it — a fever thrown in on the bowels. "A change of diet from a highly stimulating to a less invigorating regimen, an abrupt change from salted to fresh provision have frequently produced Dysentery." This was exemplified in the late war; a large detachment of men was stationed in New Jersey and their food consisted principally of beef. Those who were from the South, not being accustomed to such provisions, were nearly all

attacked with the disease, while the soldiers from the Northern States were entirely free from the complaint — in consequence of having subsisted all their lives on beef. As regards the contagious nature of this disease much diversity of opinion has been entertained, and although we are entirely persuaded that it is not so as a general rule, yet there are certain circumstances under which it obviously manifests a contagious disposition. Thus when it occurs in hospitals and armies encamped in low and marshy grounds, when it assumes the typhus type it is contagious. We are confidently assured by Doct. Chapman, whose voice on every medical subject should be particularly attended to, that excrements never produce contagion because they are always secreted by the vessels

of the body. "It is possible that the effluvia from the stools of patients laboring under Dysentery may excite the disease in their attendants. In this case a predisposition exists to the Dysentery in the bowels. These effluvia may be rendered inoffensive by obliging patients to discharge their stools in a pan or chamber pot half filled with cold water, agreeable to the practice recommended by Doct Clark. It even suffocates their foetid smell". Dysentery prevailed epidemically in Granville County North Carolina about eighteen months since and to an unusual extent. During this period it attacked several individuals in a poor man's family about the same time. The sick were confined in a

small, dirty and badly aired log cabin, and for the want of proper assistance were under the necessity of discharging the contents of their bowels beneath the floor of a plank. The putrefaction of the faeces added to the already impaired air of a dirty hut, infected every individual in the family and several friends who visited the house, and gave such a malignancy to the disease that in the short space of eight days it swept off every child (six in number) of the bereaved parents and one of the visitors. Several others, infected at this house, tho' subsequently placed in a pure atmosphere, escaped but with difficulty. The most singular fact connected with these cases is, that they all obviously

laboured under peritoneal inflammation and apparently died of that cause, although this symptom was not met with in another case.
In treating of the cure of this disease I shall attend to the inflammation, spasm and irritation.
Causing vomiting in Dysentery was a favorite practice of Sydenham and has been practiced more or less since his time; it is necessary only in the commencement of the disease and were here it is forbidden or at least may be dispensed with except under circumstances where the stomach is oppressed by foul accumulations attended with nausea, flatulency and vomiting. Under these circumstances they operate not only by evacuating the stomach of its morbid contents, but they more-

over determine to the surface and produce there an impression calculated to subvert the progress of the disease by relaxing the cutaneous capillaries, a circumstance which should be constantly kept in view, for on it materially depends the success of the practitioner. The emetic which stands highest in the cure of this disease is Ipecacuanha. By some the antimonials are prefered, but experience proves the superior efficacy of the former and there is no doubt of the fact. It may be given in every form of the disease but it seems to display its superior efficacy in those species of Dysentery in which the discharge from the bowels approaches almost to an haemorrhage. Contrary to the opinion of Cullen and Sir George Baker it operates

by relaxing the surface. Ipecac may be given by itself but it is best to combine it with some other articles that will be presently mentioned.
There is no remedy which displays such prompt and decisive benefit in this disease as blood-letting. By some it is relied on almost exclusively with a few auxiliaries; and pathology of the disease highly recommends such a course. In this disease there is considerable spasmodic constriction of the intestines, which is in many instances relieved by venesection. In some cases this disease is attended with an oppressed pulse and here the practitioner, unless very cautious, is apt to be deceived; it is recommended under such circumstances to keep the fingers

constantly on the pulse while the blood is flowing, carefully watching its motion, and if it be found that it sinks under the operation prudence directs that the bleeding should be discontinued, if, on the contrary, the pulse become more voluminous and soft the bleeding should be carried as far as the existing circumstances of the patient will admit. By attending to the above circumstances many a patient has been cured, who, under a different mode of treatment, would, probably, have died, I have seen this exemplified, in more than on instance in the practice of Dr. William V. Taylor, who stands very high as a practitioner in this state. There are other advantages attending blood-letting in this disease; it awakens the sensibility of

the stomach and renders it susceptible to the operation of future remedies; it moreover changes the hot dry and parched skin for a moist and relaxed one. In urgent cases and where the system indicates venous congestion "blood-letting is imperiously demanded, else it is apt to terminate fatally or end in a chronic state?" When the inflammation runs high twenty ounces or even more may be taken at once; this is apt to cut short the disease and if it should not be thus successful the bleeding should be repeated even in the course of twenty four or thirty six hours. Topical bleeding is an invaluable remedy in Dysentery; it is best adapted to those cases of the disease where the patient has just recovered from a severe attack of bilious

fever or some other disease, where the system is excessively debilitated and where general bleeding would prove highly mischievous. Under these circumstances it is astonishing what happy effects are produced by detracting a small quantity of blood from the abdomen. For this purpose leeches are preferred as they occasion but little or no irritation; when these cannot be procured cups answer the purpose very well and should be applied as near as possible to the seat of the pain. As auxiliary to local bleeding I will here mention the astonishing effect produced by warm fomentations. They relax the skin and produce a centrifugal determination of the fluids, and thus indirectly deplete the deeper seated seated laboring vessels. Those who have not

not refused their efficacy can but imperfectly estimate the benefit resulting from the practice. Local blood letting may likewise be resorted to when general bleeding does not relieve the pain.
After vomiting, if necessary and bleeding have been premised, purging comes in as a very important remedy.
Purgatives should be used until the intestines are thoroughly evacuated, and if the disease does not yield to this course we should then have recourse to other modes of treatment such as sweating, blistering or salivation.
In mild cases Castor oil acts very well but in severe attacks it must give way to more potent remedies. Calomel has deservedly acquired a high reputation in the cure of Dysentery; and as the disease

occurs in the Southern States there is no remedy calculated to supersede it.
In warm climates Dysentery is frequently complicated with hepatic derangements and as calomel has a strong affinity for the liver it is natural to suppose that it constitutes one of the principle means in combating the disease. By Armstrong, Johnson and Cleghorn it is almost exclusively relied on and Doct. Johnson relates his own case in which the only thing that gave him any relief or fact saved his life was a mercurial salivation. Practitioners are not at all agreed as to the quantity that should be given. Some give it in doses of three or four grains three or four times a day to produce ptyalism. Others as Armstrong and Johnson administer it in scruple

doses and they say that such quantities harrass the bowels less than smaller doses. Doct. Chapman prefers giving it combined with Opium and Ipecacuanha and there is no doubt of the superior efficacy of the method. Thus administered it not only operates on the bowels, but likewise relieves pain and determines to the surface, thus fulfiling three of the most important indications in the cure of this disease. Opiates may be resorted to in this disease much earlier than some have thought. In the commencement there is a considerable degree of irritation with spasms of the colon which are very effectually relieved by opiates. Last spring a young man came to me with Dysentery; he complained of considerable

pain in his bowels and a sensation of having his bowels tied into knots and other symptoms indicating the existence of the disease. I immediately bled him to sixteen or twenty ounces and then gave him fifteen grains of calomel combined with half a grain of opium; his pain subsided in a short time and with the occasional use of some of the mild cathartics he fast recovered and in a short time was able to pursue his ordinary avocations. The diaphoretic plan of treating this disease is highly recommended particularly by Mosely, and I think there can be but little doubt of the success of the practice. It should, however, be constantly remembered that prior to attempts to produce perspiration

the pulse and febrile action should be previously reduced, for by not attending to these precautionary measures the attempts to produce perspiration will not only prove unavailing, but may likewise prove highly detrimental to the safety of the patient. When diaphoretics are indicated, it is a very common practice in this section of the country to prescribe the asclepias decumbens in powder united with Dover's powder and few remedies are found to answer the end with more certainty.
Sixteen grains of calomel combined with four of opium and eight of ipecac made into eight pills, one to be taken every two or three hours as circumstances may require, constitute an excellent prescription in producing diaphoresis; it allays

intestinal irritation, promotes perspiration and operates on the bowels. This is the favorite prescription of Doctor Chapman and is applicable to a great number of cases. A more certain and powerful diaphoretic is the Dover powder; but when there is a necessity for evacuating the alimentary canal the former prescription will probably answer better. As auxiliary to the action of diaphoretics nothing answers better than the warm bath, it operates by relaxing the cutaneous vessels and cleansing the skin, the filth of which very often counteracts the successful operation of the sweating remedies. The warm bath is not of absolute importance in every form of the disease at least it may be dispensed with, but in extreme emergences it forms

an invaluable remedy particularly in children. Fomentations may sometimes be used with marked advantage, Cooperating with the preceding remedies the application of blisters is attended with considerable advantage; as in the case of diaphoretics they should never be employed until arterial action and fever generally be sufficiently reduced. By some they are applied to the extremities; in order to produce their best effects they should be applied to the abdomen and as near the seat of the pain as possible, but in extreme cases I see no reason why they may not be applied both to the extremities and abdomen. "The efficacy of blisters depends on counter irritation and not upon the quantity of fluids evacuated."

In this disease the patient is sometimes harrassed by certain local affections, as tormina and tenesmus, which occasionally prove very distressing. To relieve these symptoms the oleaginous mixture answers very well. Melted butter without salt or rancidity is very good, animal oils being less irritating than vegetable. Anodyne injections are likewise good, but frequently the instrument by which they are thrown up is irritating and disagreeable and as a substitute a suppository of opium answers extremely well, being readily introduced into the anus without the patient being scarcely sensible of the operation.

As the bowels in this disease are very irritable and as the slightest causes are apt to bring back the disease in

a more aggravated form particular attention should be paid to diet and drink. The diet should be of that kind which is easy of digestion and which may be taken without producing the least stimulating effect. The patient should not overload his stomach by eating too much at once of any thing; on the contrary he should eat frequently and but little at a time, and as simplicity in diet is of considerable importance in the cure of disease the patient should confine himself as much as possible to one article alone. The best articles of diet are rice, panado, sago arrow root and such like. What I have said of diet may with equal propriety be applied to drink.

The drinks usually recommended in this disease are rice water, flax seed tea, gum arabic mucilage, slippery elm &c.

As I have before observed this disease sometimes assumes the Typhus form particularly when it occurs in hospitals, armies encamped in low and marshy grounds and in ill-ventilated places.

The remedies for this form of Dysentery are blisters, stimulants and salivation. Emetics have been used by many eminent practitioners and found to be very beneficial. While the patient is under a mercurial course for this form of the disease he should be sustained by cordials and diffusible stimulants. The exhibition of nitric acid; especially if the patient have

weak bowels, is attended with very happy effects. It diffuses an agreeable warmth over the system and supports the tone of the intestines.

Dysentery frequently puts on an intermittent type, having regular exacerbations every day or every other day. The Peruvian bark is the remedy to be relied on under such circumstances. It sometimes becomes necessary to have recourse to the bark in very low and advanced stage of the disease, when the intestines have a tendency to mortification. Such cases, however, are not very frequent, but when they do occur are for the most part fatal.

The last form of this disease that I shall notice is the chronic. It is of frequent occurrence and is commonly

the consequence of a defective cure or bad management of the acute stage. While I was attending the lectures last winter I saw several patients labouring under this form of Dysentery in the Philadelphia Alms house and the practice of the attending physicians and the symptoms which characterised the disease made a considerable impression on my mind. These cases were attended with an irritable state of the intestines, frequent small evacuations, considerable pain, depraved appetite, indigestion, dry and parched skin, meagre face, sunk eye and lank countenace, all showing a determination of blood to the internal parts. Bleeding here, upon a superficial view of the case, would seem to be

hazardous and impracticable, but it is sanctioned by the highest authority in the United States and experience has decidedly proven the efficacy of the practice. It is recommended by Doctor Chapman to use "small and repeated bleedings aided by those means which procure a moderate degree of diaphoresis". Topical bleeding will prove, under these circumstances to be a highly beneficial remedy. In this form of Dysentery diaphoretics are imperiously demanded, and of the numerous class of remedies under this head none answers better than the Dover's powder. It calms the irritation of the intestines at the same time it determines to the surface. Cooperating with the Dover's powder and tending to the same end

is the flannel roller or bandage, it removes torpor, obviates griping and tenesmus, supports the intestines and excites a moderate diaphoresis. The benefits derived from the use of flannel are not only exemplified in this disease but likewise in Diarrhoe &c.

It should be carried several times round the belly, applied with moderate tightness and to prevent it from slipping shoulder straps or a piece of cloth thrown over the roller, may be used, Should these remedies fail a moderate salivation will often prove effectual. Blisters are good and in the low stages spiritus mindereri, wine whey or nitrous acid is useful in keeping up the excitement.